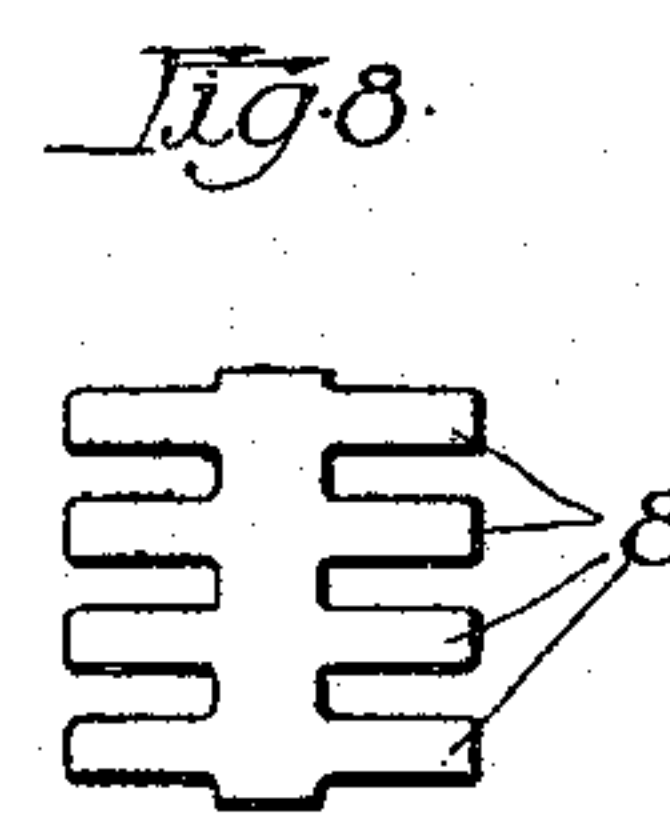
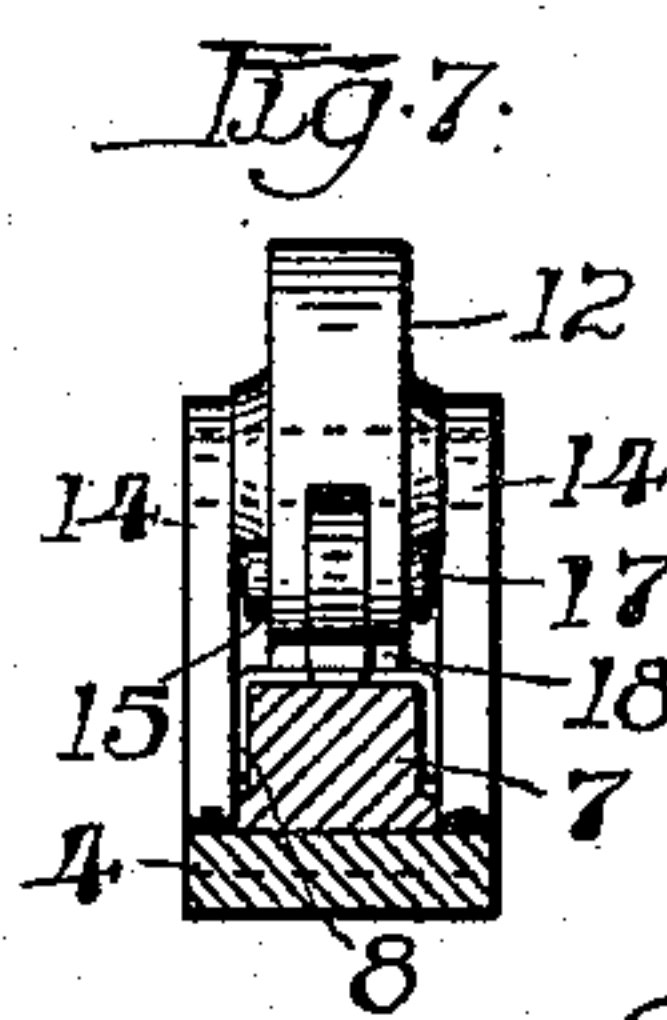
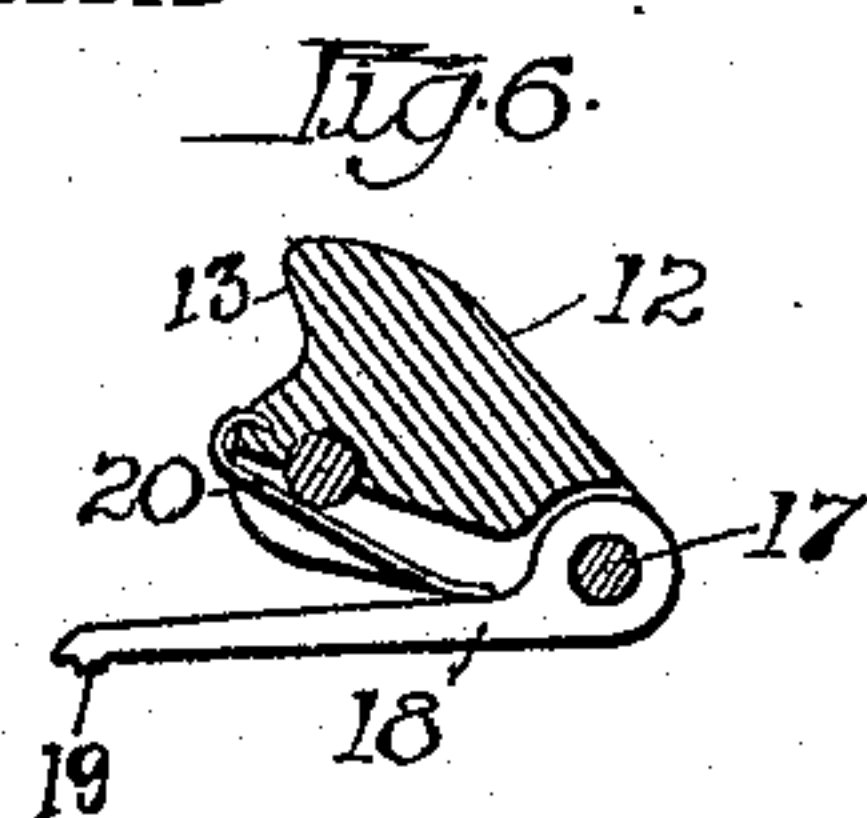
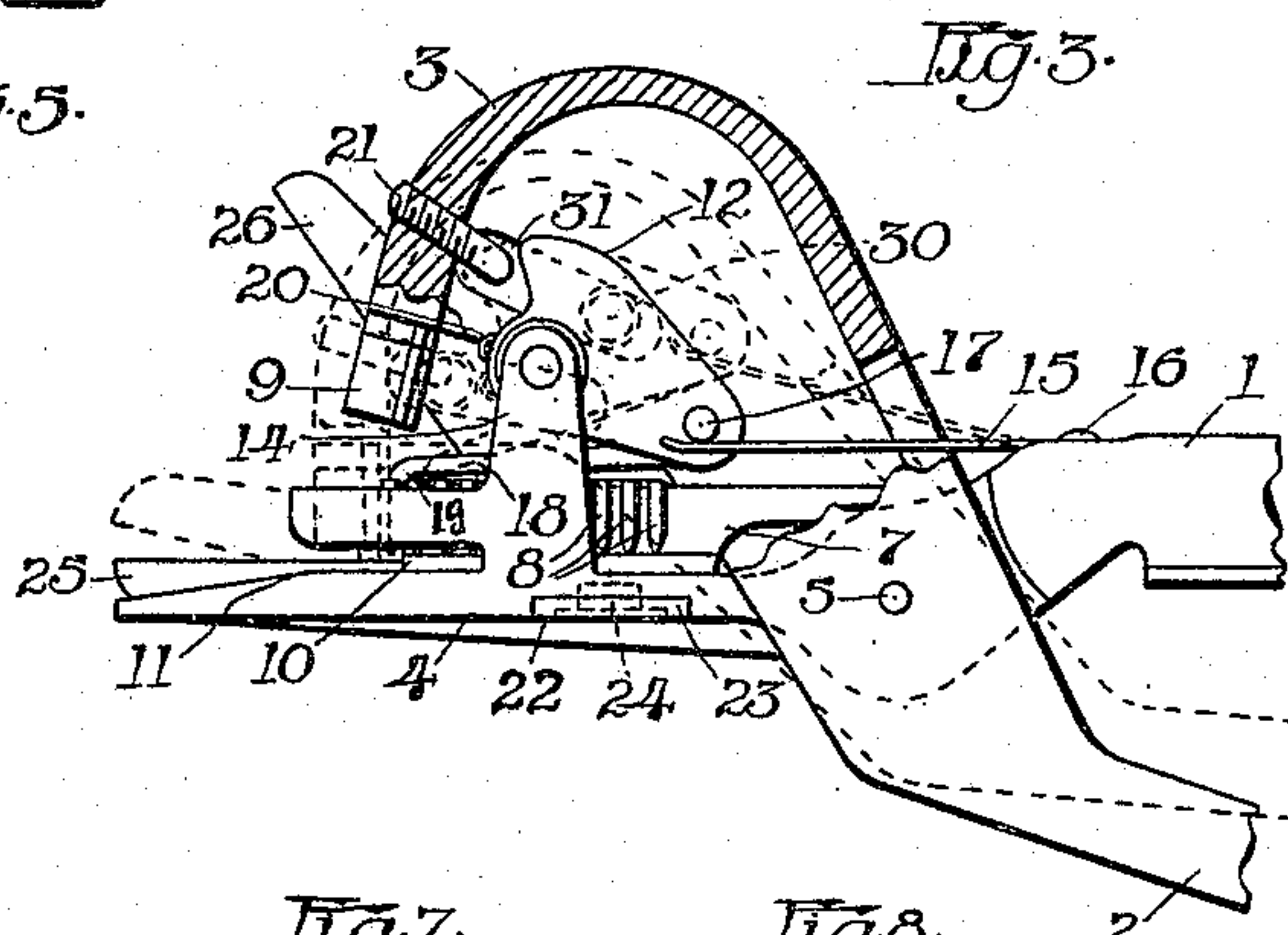
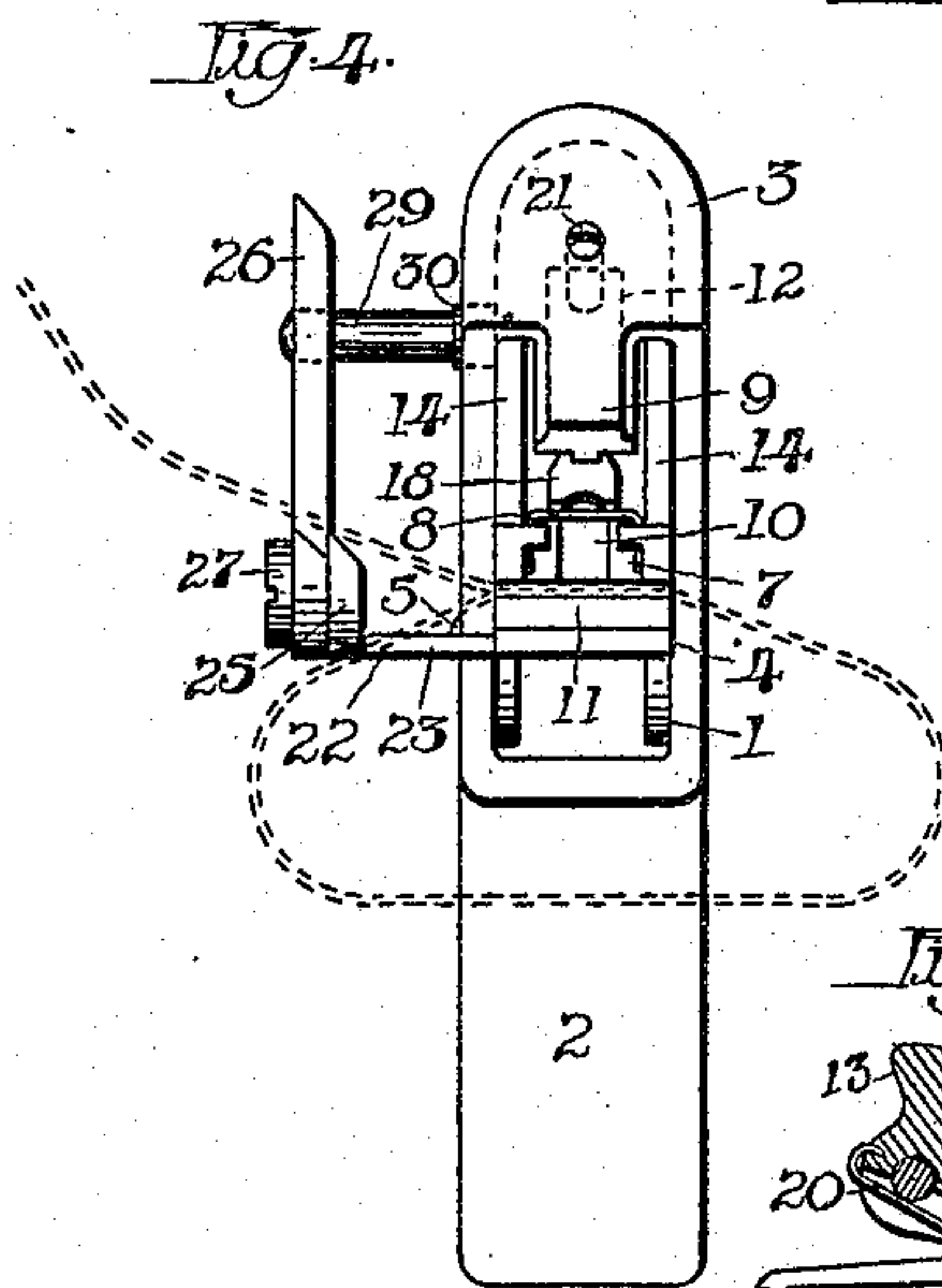
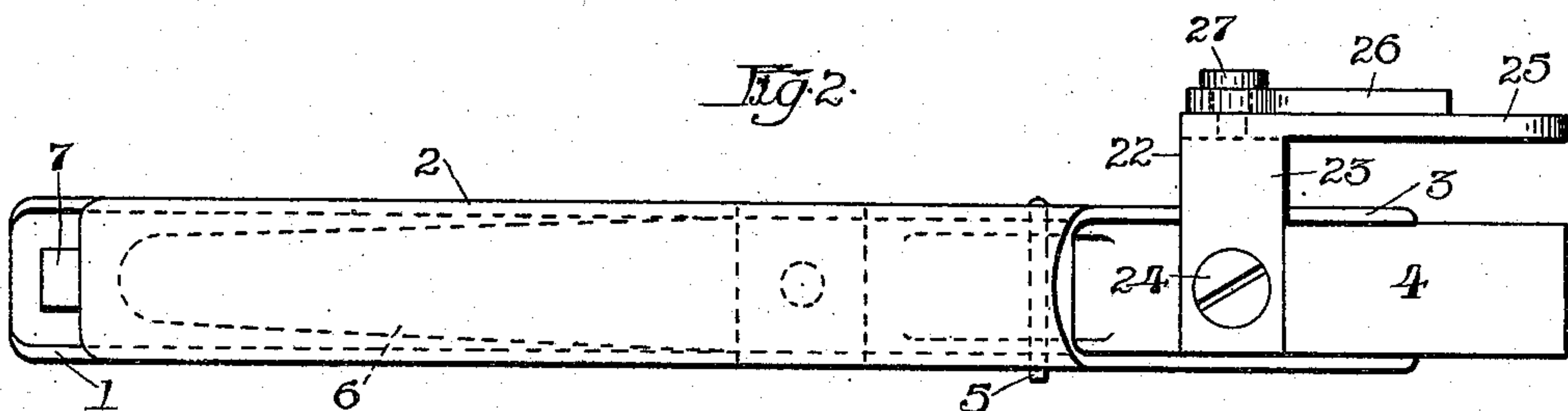
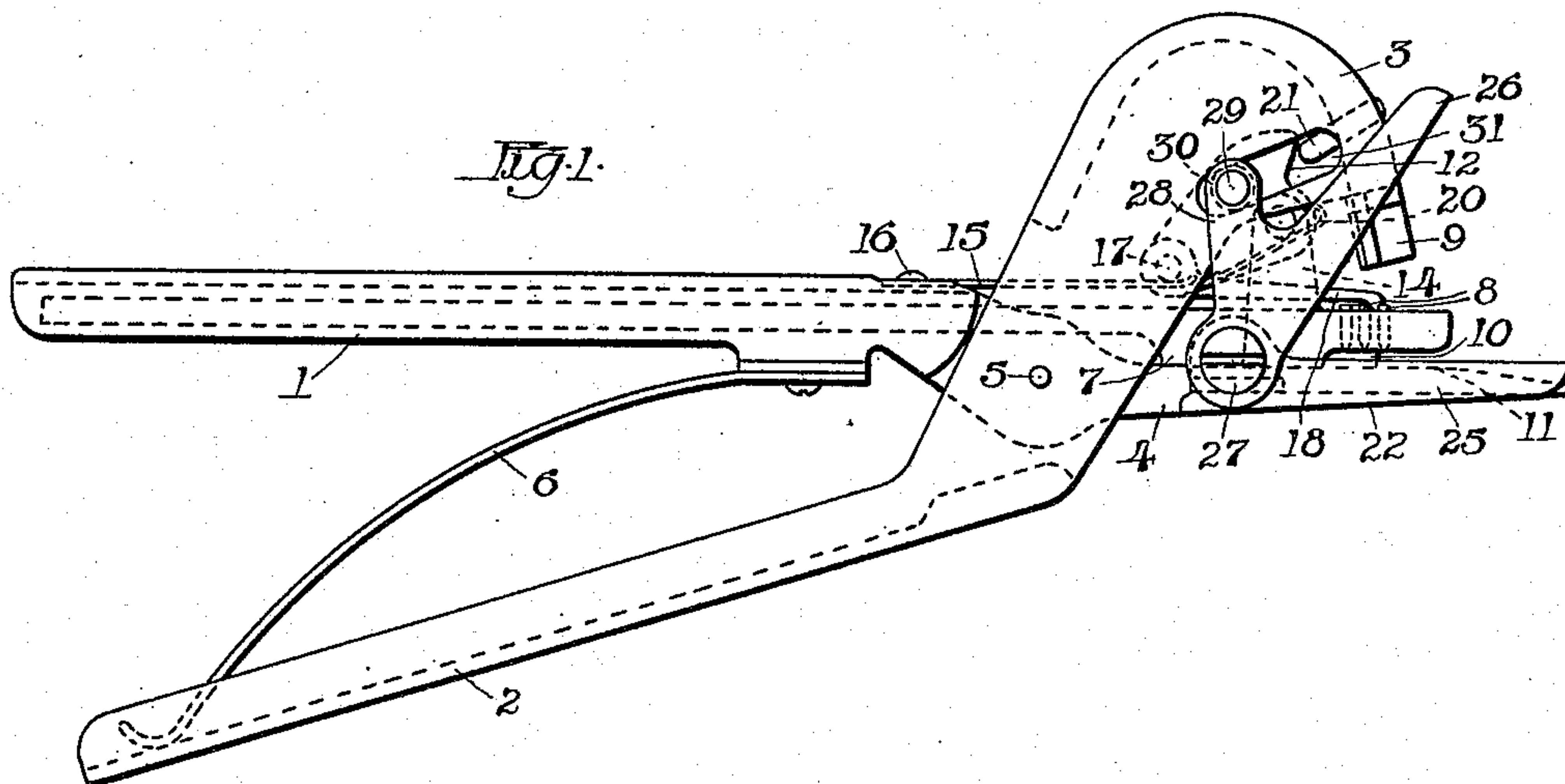


G. P. SKINNER.
CLIP SECURING MECHANISM.
APPLICATION FILED MAY 8, 1908.

930,804.

Patented Aug. 10, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE P. SKINNER, OF MILWAUKEE, WISCONSIN.

CLIP-SECURING MECHANISM.

No. 930,804.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed May 8, 1908. Serial No. 431,630.

To all whom it may concern:

Be it known that I, GEORGE P. SKINNER, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Clip-Securing Mechanism, of which the following is a specification.

My invention relates to clip securing mechanism and is designed for use in connection with a common form of prepared clips adapted to be projected through the overlapping ends of a band or other material and clenched against the surface thereof in a manner to secure the two parts together; its object being to provide a hand operable mechanism that may be conveniently manipulated for the purpose of simultaneously securing the two overlapping parts of the band together and for severing it from the ball or roll from which it is drawn. It may be used also for securing sheets of paper together for attaching price cards to clothing or other merchandise, the band severing mechanism being detached when used for the latter purpose. These objects are attained by means of the mechanism illustrated in the accompanying drawing in which:

Figure 1 is a side elevation of the complete implement; Fig. 2 is a bottom view of Fig. 1; Fig. 3 is a side elevation partly in section and illustrative of the operation of the device; Fig. 4 is an end view of Fig. 1 and shows the operation of the mechanism in securing the clip and severing the band from the source of supply; Fig. 5 represents the manner in which the two parts of the band are secured together; Fig. 6 is a detail of the clip feeding means; Fig. 7 is an end elevation of Fig. 6, and other parts of the clip feeding means partly in section; and Fig. 8 is a plan view of a common form of prepared clip for use in connection with my invention.

Like reference characters designate the same parts throughout the several views.

The device includes two main complementary members pivotally connected in a tongs like manner and having hand pieces and jaw members upon which are mounted the operative parts of the mechanism. These main members for the purpose of description may be designated as upper and lower hand pieces 1 and 2 respectively, and upper and lower opposing jaw members 3

and 4; the upper jaw 3 being integral with hand piece 2 and the lower jaw 4 with hand piece 1; the two hand pieces being pivotally connected by means of a cross pin 5.

A plate spring 6 is secured at one end to the hand piece 1 and its opposite end contacts with hand piece 2 and operates to normally hold the jaws in an open position by swinging the members about their pivotal connections.

Secured to parts 1 and 3 is a portion 7 adapted to form a magazine to receive a supply of prepared clips 8 that are preferably formed in strips as shown in Figs. 7 and 8; the individual clips being severed from the strip by the operation of the securing mechanism.

9 represents a combined shearing and pressure block, secured to jaw 3 and operative in connection with a lower shearing member 10 that is secured to the forward end of the magazine portion 7, and an anvil portion 11 forming part of jaw 4 in a manner to first sever the clip from the strip, and to cause it to pierce the two parts of the band, and second to clench the two legs of the clip against the lower surface of the band as shown in Fig. 5.

Mechanism for automatically advancing the strip of clips include a tumbler 12 pivotally connected at its forward end 13 with vertically arranged ear portions 14 supported upon the lower jaw 4, and 15 represents a plate spring having one end secured to the hand piece 1 at 16, and its opposite end contacting with opposite ends of a pin 17 passing through the rear end of the tumbler, the spring operating in a manner to swing the tumbler in one direction about its pivots. Pivotaly mounted upon the middle portion of the pin is a pawl 18 having its forward end 19 provided with shoulder portions that are adapted to successively engage with the individual clips in a manner to feed them toward the severing and securing mechanism when the tumbler is turned about its pivots in opposite directions, and 20 represents a plate spring having one end secured to the tumbler and its opposite end contacting with the pawl 18 in a manner to yieldingly hold said pawl in contact with the clips.

21 represents an adjustable contact pin passing through a part of the upper jaw member and adapted to contact with the up-

per part of the tumbler in a manner to control its movements under the action of spring 15, and to cause it to swing about its pivots in a manner to advance the pawl against the clips when the hand pieces are separated by means of the action of spring 6.

In forming the bands from ribbons of paper or other material wound in rolls or balls, it is desirable to provide means for severing the part forming the band from the roll, and the mechanism provided includes a shearing attachment 22 comprising a base plate 23 having an opening therein whereby it may be secured to the lower jaw member 4 by means of a screw 24; a fixed shearing blade 25 that is preferably formed integral with said base-plate, and a movable blade 26 pivotally connected with the fixed blade by means of a pivot screw 27.

The movable blade is provided with a vertically arranged ear portion 28, and 29 represents a laterally projecting stud secured thereto, which stud is provided at its inner end with a roller 30 that is received by a slot 31 formed in the side of the jaw member 3, said slot operating to swing the movable member of the shearing mechanism about its pivot in a manner to sever the band from the roll simultaneously with the operative action of the clip securing means. In operating upon single lengths of ribbon, or in fastening sheets of paper together the shearing mechanism may be detached.

What I claim as being my invention and desire to secure by Letters Patent is:

1. A clip securing mechanism including, in combination, a pair of opposing pivotally connected jaw members having clip securing means mounted thereon, hand pieces connected with said jaw members by which said members may be operated, a magazine member carried by one of said jaw members and adapted to receive a supply of prepared clips, a tumbler pivotally mounted upon the same jaw member, a clip feeding pawl pivotally connected with said tumbler and adapted to successively engage with the clips and feed them toward the securing means, a spring operative between one of said hand pieces and said tumbler in a manner to rock it in one direction, and an adjustable contact member carried by the opposing jaw member and operative to control the rocking movement of said tumbler.

2. A clip securing mechanism including in combination, a pair of opposing pivotally connected jaw members having clip securing means mounted thereon, hand pieces connected with said jaw members and by means of which they may be operated, a magazine member carried by one of said jaw members and adapted to receive a supply of prepared clips, a tumbler pivotally mounted upon the same jaw member, a clip feeding pawl pivotally connected with said tumbler and adapted to successively engage with the clips in a manner to feed them toward the securing means and a spring operative between said tumbler and pawl to yieldingly hold said pawl in engagement with the clips, a spring operative between one of said hand pieces and said tumbler in a manner to rock it in one direction and a contact member carried by the opposing jaw member and operative to control the rocking movement of said tumbler.

3. A clip securing mechanism including in combination, a pair of opposing pivotally connected jaw members having clip securing means mounted thereon, a shearing mechanism including complementary shearing blades mounted upon one of said jaw members adjacent said clip securing means, one of said shearing blades having a laterally projecting stud engaging with the opposing jaw member in a manner to cause the blade to operate in a shearing direction simultaneously with a movement of the clip securing means in an operative direction.

4. A clip securing mechanism including in combination, a pair of opposing pivotally connected jaw members having clip securing means mounted thereon, one of said jaw members having a stop therein, a shearing attachment including complementary shearing blades mounted upon one of said jaw members adjacent said clip securing means, one of said shearing blades having a laterally projecting stud engaging with the slot in the opposing jaw member in a manner to cause said blade to operate in a shearing manner simultaneously with a movement of the clip securing means in an operative direction.

GEORGE P. SKINNER.

Witnesses:

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